WHAT IS CLAIMED IS:

1. A method of performing a multicast and broadcast transmission, comprising:

receiving multicast/broadcast (M/B) packet data of a different network server, transmitted from a packet data serving node (PDSN), without setting links between the PDSN and target mobile stations for an M/B transmission within a mobile communication network;

temporarily storing the received M/B packet data, performing an error control procedure, and transmitting the received M/B packet data to a plurality of mobile stations through an M/B packet data dedicated channel; and

processing the M/B packet data by only the target mobile stations that are identified by header information of the received M/B packet data.

2. The method of claim 1, further comprising:

identifying the M/B packet data and general packet data and setting an internal process routine by a data packet controller;

receiving the M/B packet data from the data packet controller and outputting a cellular data multicasting protocol service data unit (CDMP SDU) by adding a link header to the M/B packet data;

receiving the CDMP SDU, segmenting the CDMP SDU into a plurality of data units, and outputting a CDMP protocol data unit (PDU) generated by adding a multicast header to each separated data unit to a forward common traffic channel (f-ctch); and

segmenting the CDMP PDU inputted through the f-ctch into a prescribed size and transmitting a forward common data channel (F-CDCH) SDU generated by adding a Mux header and a CRC code to each segmented data unit to the plurality of mobile stations through a forward common data channel (F-CDCH).

3. The method of claim 2, wherein the link header comprises identification information on the M/B packet data and unicast packet data.

4. The method of claim 2, wherein the link header comprises multicast group identifier information.

5. The method of claim 2, wherein the link header comprises a sequence number of the received M/B packet data.

6. The method of claim 2, wherein the inputted CDMP SDU is segmented to a maximum of 16 data units.

7. The method of claim 2, further comprising performing a forward error correction (FEC) coding.

8. The method of claim 2, wherein the multicast header comprises a sequence number of the received M/B packet data.

9. The method of claim 2, wherein the multicast header comprises multicast group identifier information.

10. The method of claim 2, wherein the CDMP SDUs are stored in a buffer, for a predetermined time period.

11. The method of claim 2, wherein the F-CDCH SDU includes two local transmission units generated by adding the Mux header and the CRC code to each of the segmented data units.

12. The method of claim 1, further comprising:

removing a Mux header and a CRC code from a forward common data channel (F-CDCH) service data unit (SDU) received through a F-CDCH;

extracting only CDMP protocol data units (PDUs) of a multicast group to which a corresponding mobile station has subscribed from a plurality of CDMP PDUs inputted through a forward common traffic channel (f-ctch);

removing a multicast header of the extracted CDMP PDUs;

generating a CDMP SDU block indicating that the extracted CDMP PDUs are aligned in good order;

receiving the CDMP SDU block and completing an original CDMP SDU block without omission of any data unit;

generating the M/B packet data without a link header by removing a link header contained in the CDMP SDU block; and

transmitting the M/B packet data to an upper application layer.

13. The method of claim 12, further comprising performing a forward error correction (FEC) decoding by cellular data multicasting protocol (CDMP).

14. The method of claim 12, further comprising checking a sequence number contained in the multicast header to align the M/B packet data.

15. The method of claim 12, further comprising checking multicast group identifier information contained in the multicast header, in order to extract only the CDMP PDUs of the multicast group to which the corresponding mobile station has been subscribed.

16. The method of claim 12, further comprising transmitting a negative acknowledgment (NAK) signal to a base station side for a re-transmission of a corresponding packet when an error occurs in packet transmission.

17. The method of claim 16, wherein the NAK signal comprises a sequence number and a multicast group identifier of the corresponding packet.

18. The method of claim 1, further comprising:

transmitting the M/B packet data from a cellular data multicasting protocol (CDMP) to a common channel multiplex sub-layer using a forward common traffic channel (f-ctch) as a logical channel; and

accessing multiple mobile stations of the plurality of mobile stations within a subscription area using a forward common data channel (F-CDCH) as a physical channel.

19. The method of claim 18, wherein at least one F-CDCH exists for each sector of a base station.

20. The method of claim 18, wherein if there are two F-CDCHs per sector of a base station, a first F-CDCH transmits a normal M/B packet and a second F-CDCH re-transmits a packet previously received with an error.

21. The method of claim 1, wherein a base station side of the mobile communication network comprises a base station transceiver subsystem and a base station controller.

22. The method of claim 1, wherein each of the target mobile stations requests re-transmission of a packet from a base station side if there is an error in the received M/B packet data.

23. The method of claim 1, further comprising:

transmitting the M/B packet data from a common channel multiplex sub-layer to a cellular data multicasting protocol using a forward common traffic channel (f-ctch) as a logical channel; and

receiving the M/B packet data that has been transmitted to a plurality of unspecified mobile stations by a base station side using a forward common data channel (F-CDCH) as a physical channel.

24. A method of transmitting data in a mobile communication system, comprising:

receiving packet data destined to a plurality of subscribers served by a base station controller/ packet control function (BSC/PCF) with the BSC/PCF;

transmitting the packet data from the BSC/PCF to a plurality of base stations, which provide service to the plurality of subscribers, using a single communication link between the BCS/PCF and each of the plurality of base stations; and

transmitting the packet data from the plurality of base stations to designated ones of the plurality of subscribers.

25. The method of claim 24, wherein the packet data comprises at least one of a multicast and a broadcast message.

26. The method of claim 24, wherein the BSC/PCF receives the packet data from a packet data serving node through a single communication link.

27. The method of claim 24, wherein the packet data is transmitted to the designated subscribers through a common channel.

28. The method of claim 24, wherein the BSC/PCF receives the packet data from a packet data serving node (PDSN) and no link is established between the PDSN and any specific one of the plurality of subscribers.

29. A method of performing data communication, comprising:

receiving at least one of a multicast and a broadcast message with a subscriber terminal through a common channel;

determining whether the subscriber terminal is an intended recipient of the message based on header information of the message.

30. The method of claim 29, further comprising:

transmitting a negative acknowledgment message with the subscriber terminal if the subscriber terminal is the intended recipient and the message is received with an error; and

disposing of the message if the subscriber terminal is not the intended recipient, without providing the content of the message to a man-machine interface of the subscriber terminal.

31. The method of claim 29, wherein the subscriber terminal does not establish a link, which specifically identifies the subscriber terminal, with a packet data serving node.

32. A method of performing data communication in a mobile communication system, comprising:

receiving packet data destined to a plurality of subscribers served by a base station controller/ packet control function (BSC/PCF) with the BSC/PCF;

transmitting the packet data from the BSC/PCF to a plurality of base stations, each of which provides service to the subscribers, using a single communication link between the BCS/PCF and each of the plurality of base stations;

transmitting the packet data from the plurality of base stations to the subscribers; and

determining whether each of the plurality of the subscribers is an intended recipient of the packet data, based on header information of the packet data.

33. The method of claim 32, wherein the packet data comprises at least one of a multicast message and a broadcast message.

34. The method of claim 32, wherein the BSC/PCF receives the packet data from a packet data serving node through a single communication link.

35. The method of claim 32, wherein the packet data is transmitted to each of the plurality of subscribers through a common channel.

36. The method of claim 32, wherein the BSC/PCF receives the packet data from a packet data serving node (PDSN) and wherein no link is established between the PDSN and any specific one of the plurality of subscribers.

37. The communication method of claim 32, further comprising:

transmitting a negative acknowledgment message with each of the plurality of subscribers that is determined to be the intended recipient and if the packet data is received with an error; and

disposing of the packet data with each of the plurality of subscribers that is determined not to be the intended recipient, without informing a man-machine interface, of the respective subscriber, of the packet data content.

38. A communication system, comprising:

a packet data serving node (PDSN) configured to receive a multicast or broadcast message from a remote server as packet data;

a base station controller/ packet control function (BSC/PCF) configured to receive the packet data, destined to multiple subscribers associated with the BSC/PCF, from the PDSN through a single communication link; and

a plurality of base stations, each of which provides service to the subscribers and each of which is configured to receive the packet data from the BSC/PCF through a single communication link between the BCS/PCF and each of the plurality of base stations, wherein each of the plurality of base stations transmits the packet data to subscribers within a coverage area of the base station through a common channel, wherein each of the subscribers determines whether the subscriber is an intended recipient of the packet data, based on header information within the packet data, and wherein no link is established between the PDSN and any specific one or more of the subscribers.

39. A base station of a mobile communication network, comprising:

a data packet controller that identifies multicast/ broadcast (M/B) packet data and general packet data and sets an internal process routine;

an M/B link access controller (LAC) that receives the M/B packet data from the data packet controller and outputs a cellular data multicasting protocol service data unit (CDMP SDU), which is generated by adding a link header to the M/B packet data;

a CDMP that receives the CDMP SDU, segments the CDMP SDU into a plurality of data units, and outputs a CDMP protocol data unit (PDU), generated by adding a multicast header to each separated data unit, to a forward common traffic channel (f-ctch); and

a common channel multiplex sub-layer that segments the CDMP PDU inputted through the f-ctch into a prescribed size and transmits a forward common data channel (F-CDCH) SDU, generated by adding a Mux header and a CRC code to each segmented data unit, to the plurality of mobile stations through a forward common data channel (F-CDCH).

40. A mobile station, comprising:

a common channel multiplex sub-layer that removes a Mux header and a CRC code from a forward common data channel (F-CDCH) service data unit (SDU) received through a F-CDCH;

a cellular data multicasting protocol (CDMP) that extracts only CDMP protocol data units (PDUs) of a multicast group to which the mobile station has subscribed, among the CDMP PDUs inputted through a forward common traffic channel (f-ctch), removes a multicast header of the CDMP PDUs, and outputs a CDMP SDU block indicating that the CDMP PDUs are aligned;

an M/B link access controller (LAC) that receives the CDMP SDU block, completes an original CDMP SDU block without omitting a data unit, and outputs the M/B packet data without a link header, by removing the link header contained in the CDMP SDU block; and

a data packet controller that transmits the M/B packet data received from the M/B LAC to an upper application layer.

41. The method of claim 2, wherein the prescribed size is a Mux PDU type 3 size.

42. The method of claim 10, wherein the F-CDCH SDU includes two local transmission units generated by adding the Mux header and the CRC code to each of the segmented data units.

43. The method of claim 29, wherein the message is sent from a base station contoller/packet control function of a mobile communication system and wherein the subscriber terminal is one of a plurality of mobile terminals.